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January 1934

Test 222: John Deere A

Tractor Test Museum
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Copy of Report of Official Tractor Test No.222

Dates of test: April 19 to 27, 1934.

Name and model of tractor: JOHN DEERE GENERAL PURPOSE "MODEL A"

Manufacturer: John Deere Tractor Company, Waterloo, Iowa.

Manufacturer's rating: NOT RATED.

Highest rating permissible under the recommendations of the A.S.A.E. and

S.A.E. Tractor Rating Codes: Drawbar - 16.22 H.P. Belt - 23.52 H.P.

One carburetor setting (93.5% of maximum) was used thruout this test.

B R A K E H O R S E P O W E R T E S T S

H.P.	Crank shaft speed	Fuel Consumption Gals. : H.P. : Lbs. @ hrs. @ : H.P. hour : gal. : hour	Water consumption per hour gallons Cool- : In : ing : fuel : Total : : : med : :	Temp. Deg. F. Air	Barometer Inches of Mercury
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OPERATING MAXIMUM LOAD TEST. ONE HOUR

24.71 ; 974 ; 2.447 ; 10.10 ; 0.697 ; 0.000 ; 0.000 ; 0.000 ; 209 ; 72 ; 28.900

RATED LOAD TEST. ONE HOUR

23.63 : 976 : 2.251 : 10.50 : 0.671 : 0.000 : 0.000 : 0.000 : 209 : 70 : 28.900

* VARYING LOAD TEST. TWO HOURS

23.77	:	978	:	2.254	:	10.55	:	0.668	:	--	:	--	:	--	:	209	:	70	:	--
0.85	:	1057	:	1.232	:	0.69	:	10.200	:	--	:	--	:	--	:	209	:	70	:	--
12.48	:	1029	:	1.619	:	7.71	:	0.913	:	--	:	--	:	--	:	208	:	70	:	--
24.29	:	947	:	2.403	:	10.11	:	0.697	:	--	:	--	:	--	:	209	:	69	:	--
6.56	:	1038	:	1.513	:	4.34	:	1.623	:	--	:	--	:	--	:	209	:	69	:	--
18.49	:	1000	:	1.947	:	9.50	:	0.741	:	--	:	--	:	--	:	209	:	68	:	--
14.41	:	1008	:	1.828	:	7.88	:	0.893	:	0.148	:	0.000	:	0.148	:	209	:	69	:	28.918

*20 minute runs. Last line is average for two hours.

DRAWBAR HORSE POWER TESTS

H.P.	:Draw :Bar	:Speed :miles	:Crank :shaft	:Slip :on	:Fuel Consumption :H.P.; Lbs.	:Water: :used :	:Temp. :	:	:Barometer
	:pull :pounds	:per :hour	:speed :R.P.M.	:drive :wheels	:Gal.: hr. : per : : H.P.:	:per : : Gal.:	:Cool- :Air	:Inches of	:Mercury
	:	:	:	% : hour:	gal.: : hour:	hour: : hour:	med : :	:	:

RATED LOAD TEST. TEN HOURS. SECOND GEAR.

16.31 ; 1839 ; 3.33 ; 976 ; 3.33 ; 2.219;735 ; 0.958;0.071; 203 ; 53 ; 28.623

MAXIMUM LOAD TEST

18.72	:	2923	:	2.40	:	976	:	9.29	:	-----	:	Not Recorded	:	---	:	204	:	65	:	28.864		
18.43	:	2089	:	3.31	:	974	:	4.60	:	-----	:	"	:	"	:	---	:	202	:	63	:	28.735
16.55	:	1166	:	5.32	:	974	:	2.15	:	-----	:	"	:	"	:	---	:	207	:	56	:	29.020
14.06	:	748	:	7.05	:	972	:	1.13	:	-----	:	"	:	"	:	---	:	204	:	63	:	28.800

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AGRICULTURAL COLLEGE, LINCOLN

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BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. 410009 Type 2 Cylinder, Horizontal
Head I Mounting Crosswise
Bore and stroke: 5 1/2" by 6 1/2" Rated R.P.M. 975
Port Diam. Valves: Inlet 1 7/8" Exhaust 1 5/8"
Belt pulley: Diam. 12 13/16" Face 7 3/8" R.P.M. 975
Magneto: Fairbanks-Morse Model DRV 2A
Carburetor: Schebler Model DLTX8 Size 1 1/2"
Governor: Own No. None Type Centrifugal
Air Cleaner: Vortox No. 2071D Type Oil washed wire filter
Lubrication: Pressure

CHASSIS: Type 4 wheels, 2 drivers Serial No. 410009 Drive Enclosed gear
Clutch: Own Type Disc operated by Hand
Advertised speeds, miles per hour: First 2 1/3 Second 3
Third 4 3/4 Fourth 6 1/4 Reverse 3 1/2
Drive wheels: Diameter 50" Face 6"
Lugs: Type Spade No. per wheel 12 Size 4 1/4" high by 3 1/4" face
Extension rims: Width 6" Lugs per rim 12 Size 4 1/4" by 3 1/4"
Seat: Pressed steel
Total weight as tested (with operator) 4059 pounds.

FUEL AND OIL:

Fuel: Distillate Weight per gallon 7.04 pounds
Oil: S.A.E. Viscosity No. 40 The oil was drained once
- at the end of the test.
Total oil to motor 4.565 gallons
Total drained from motor 1.992 gallons
Total time motor was operated 53 hours

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REPAIRS AND ADJUSTMENTS

During the drawbar tests grease leaked from the left end of the rear axle housing. The exhaust pipe to exhaust manifold connection became loose and was tightened during the maximum drawbar tests.

REMARKS

The tests herein reported were conducted with one carburetor setting which remained unchanged thruout the tests. This condition should be recognized when comparing this test with any Nebraska test conducted prior to 1928.

The drawbar tests were run with drive wheels equipped with spade lugs and extension rims and lugs as listed on Page 2 of this report.

In the advertising literature submitted with the specifications and application for test of this tractor we find no claims and statements which, in our opinion, are unreasonable or excessive.

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 222.

Carlton L. Zink
Engineer-in-charge

E. E. Brackett

C. W. Smith

E. B. Lewis

Board of Tractor Test Engineers